

WHAT WE CLAIM IS:

1. An electronic camera comprising a phototaking optical system, a two-dimensional image pickup element for receiving an object image formed by said phototaking optical
5 system, a two-dimensional display element for displaying said object image in the form of an image to be viewed, and a magnifying optical system for guiding said image to a viewer's eyeball, wherein:

said magnifying optical system includes a first
10 reflecting surface for turning back an optical path between said two-dimensional display element and said viewer's eyeball to achieve compactness,

said first reflecting surface being formed by a curved surface having an image-magnifying action.

15 2. An electronic camera according to claim 1, wherein:

said magnifying optical system further includes a second reflecting surface located in opposition to said first reflecting surface to turn back an optical path between said first reflecting surface and said second reflecting surface,
20 thereby making a distance between said two-dimensional display element and said viewer's eyeball short.

3. An electronic camera according to claim 2, wherein:

said first reflecting surface and said second reflecting surface are a prism member made up of a transparent medium
25 having a refractive index (n) greater than 1.3 ($n > 1.3$).

4. An electronic camera according to claim 3, wherein:

said first reflecting surface is formed on one surface of said prism member, and said second reflecting surface is

located at a position where a medium of said prism member is sandwiched between said first reflecting surface and said second reflecting surface.

5 5. An electronic camera according to claim 3, wherein:
said second reflecting surface is a combined
~~transmitting and reflecting element~~ according to claim 3, wherein:

at least one of said first reflecting surface or said second reflecting surface is formed by a rotationally asymmetric surface having an action to make correction for
10 aberrations produced by decentration.

7. An electronic camera according to claim 6, wherein:
said two-dimensional image pickup element is located in opposition to said two-dimensional display element.

8. An electronic camera according to any one of claims
15 1 to 7, wherein:

said magnifying optical system has two actions, one to guide an image displayed on said two-dimensional display element to said viewer's eyeball and the other to guide object light phototaken by said phototaking optical system
20 directly to said viewer's eyeball.

9. An electronic camera according to any one of claims 1 to 7, which further comprises between said two-dimensional image pickup element and said two-dimensional display element a signal processing circuit, a controller, a driver and a
25 recording/reproducing unit so that an object image received at said two-dimensional image pickup element is recorded in said recording/reproducing unit upon photoelectric conversion and, at the same time, is displayed on said two-dimensional

display element by said driver via said controller during
phototaking, and, after phototaking, a signal recorded in
said recording/reproducing unit is reproduced to display an
electronic image on said two-dimensional display element by
5 said driver via said controller.